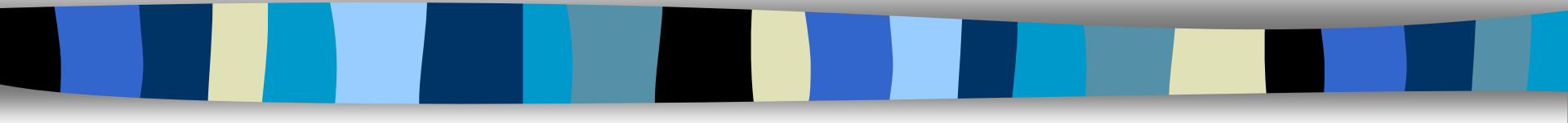


Graphing by Table



Substituting values...

- To graph a line given only the function, plug different x values into the function to receive y values.
- Example:
 - $2 + c = f$
 - So if $c = 3$, then $f = \underline{5}$
 - If $c = 4$, then $f = \underline{6}$
 - If $c = -8$, then $f = \underline{-6}$
 - If $c = -20$, then $f = \underline{-18}$
 - If $c = -2$, then $f = \underline{0}$



General Rules

* If the x-values are not given, use the following values:

$$x = -2$$

$$x = -1$$

$$x = 0$$

$$x = 1$$

$$x = 2$$

Setting up the table.

Graph the following line using a table: $y=2x$

x	$y = 2x$	y	(x,y)
-2	$y = 2(-2)$	-4	$(-2,-4)$
-1	$y = 2(-1)$	-2	$(-1,-2)$
0	$y = 2(0)$	0	$(0,0)$
1	$y = 2(1)$	2	$(1,2)$
2	$y = 2(2)$	4	$(2,4)$

The table gives us 5 ordered pairs.
We will graph these five points:

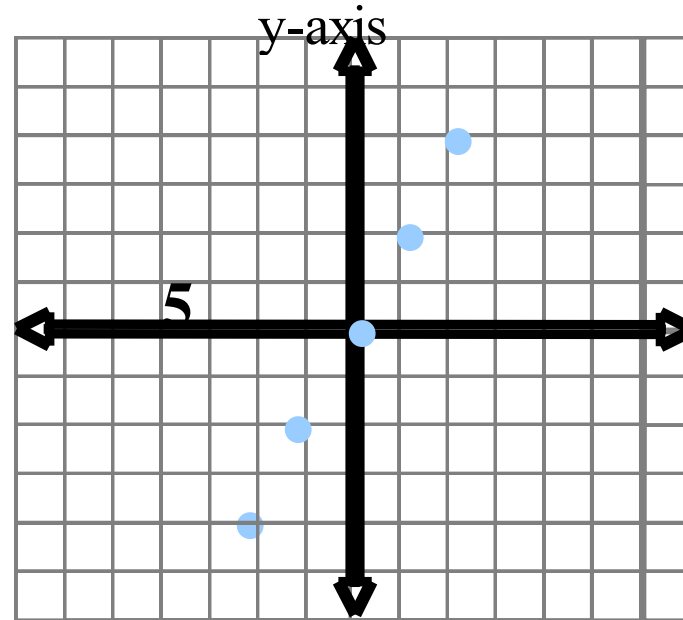
$(-2,-4)$

$(-1,-2)$

$(0,0)$

$(1,2)$

$(2,4)$

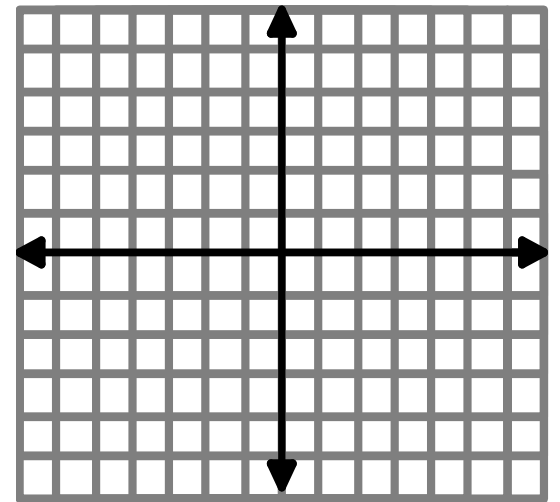


Connect these five points, they should make
a straight line if you do it correctly.

Graph the following line using a chart.

$$y = 3x - 1$$

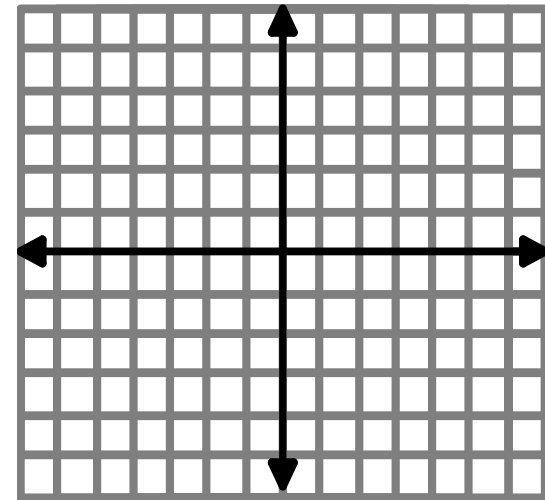
x	$y = 3x - 1$	y	(x,y)
-2	$y = 3(-2) - 1$	-7	(-2,-7)
-1	$y = 3(-1) - 1$	-4	(-1,-4)
0	$y = 3(0) - 1$	-1	(0,-1)
1	$y = 3(1) - 1$	2	(1,2)
2	$y = 3(2) - 1$	5	(2,5)



Graph the following line using a chart.

$$y = -2x + 1$$

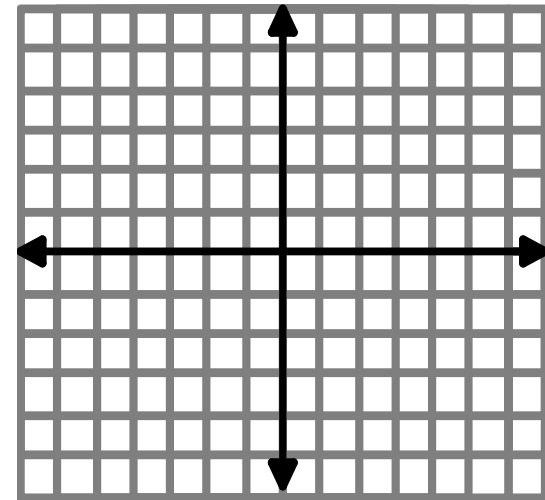
x	$y = -2x+1$	y	(x,y)
-2	$y = -2(-2)+1$	5	$(-2,5)$
-1	$y = -2(-1)+1$	3	$(-1,3)$
0	$y = -2(0)+1$	1	$(0,1)$
1	$y = -2(1)+1$	-1	$(1,-1)$
2	$y = -2(2) + 1$	-3	$(2,-3)$



Graph the following line using a chart.

$$-y = -3x + 2$$

x	$y = 3x - 2$	y	(x,y)
-2	$y = 3(-2) - 2$		
-1	$y = 3(-1) - 2$		
0	$y = 3(0) - 2$		
1	$y = 3(1) - 2$		
2	$y = 3(2) - 2$		



Graph the following line using a chart.

$$x - y = 6$$

x	y =	y	(x,y)

